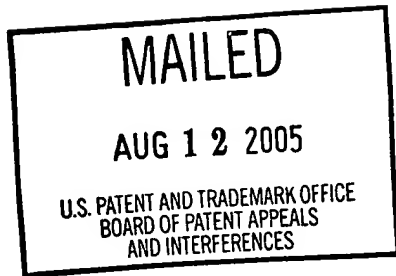


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

**UNITED STATES PATENT AND TRADEMARK OFFICE**



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte LISA A. CORNISH

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Appeal No. 2005-1639  
Application No. 09/782,371

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ON BRIEF

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Before MCQUADE, NASE and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-17, which are all of the claims pending in this application.

**BACKGROUND**

The appellant's invention relates to a method and article for coloring hair using a head cap provided with a plurality of long narrow slits around the cap in two or more orientations to allow locks of hair to be foiled together. Each slit can be a zigzag or wavy line (see Figures 4 and 5). The slits can be reinforced by stitching the slits or

adding thicker plastic around the slits, for example. Alternatively, the slits can be configured in “zip lock fashion” such that the slit can be partially closed to tighten the slit upon the shank of hair to secure the hair when pulled through the slits. The appellant uses the term “zip lock” to refer to “interlocking seams for a linear press-closure which holds together by interference between two linear elements of either side of the seal, with or without a movable closure element, such as those sold under the trademark ZIPLOC” (specification, page 5). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

### ***The Applied Prior Art***

The examiner relied upon the following prior art references of record in rejecting the appealed claims:

Sanzo	3,103,933	Sep. 17, 1963
Anderson	3,304,945	Feb. 21, 1967

### ***The Rejections***

The following rejections are before us for review.

Claims 1-7, 9-11, 13-15 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Anderson.

Claims 8, 12 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Anderson in view of Sanz.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the final rejection (mailed December 24, 2002) and answer (mailed March 24, 2004) for the examiner's complete reasoning in support of the rejections and to the brief (filed November 28, 2003) and reply brief (filed May 24, 2004) for the appellant's arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Anderson discloses a hair treatment cap 11 for treating a person's hair in a predetermined pattern while other portions of the person's hair remain untreated or may be subjected to another treatment in a different pattern and/or manner to produce interesting and decorative patterns therein (column 1, lines 12-19). Anderson's cap is provided with a plurality of narrow, elongated openings 15 having clamping means 14 located adjacent thereto, which may substantially cover the cap or be arranged in any desired pattern (column 2, lines 51-52). Each clamp includes a fixed element 17 which is firmly affixed to the body 22 of the cap and forms the upper side of the opening 15 and a movable element 18 pivotally mounted at one end of fixed element 17 to form the opposing jaw of the clamp. According to Anderson (column 3, lines 23-28), this clamp

construction "provides means whereby the lock of hair 16 is firmly clamped in position with a substantially fluid-tight seal whereby there is little or no likelihood that treating solution will seep downwardly through the clamp into contact with hair beneath the opening 15." Anderson also discloses that the openings 15 are in the form of slits having a length from one-half inch to one inch or, for effects such as sunbursting, a length of as much as two and one-half inches (column 4, lines 34-42). Anderson adds that, "[w]ith these greater lengths thus available, the width of the opening, while not critical, preferably is as small as practicable" (column 4, lines 49-51).

Each of the appellant's claims 1-17 recites a slit width in the range of 1/64 inch to 1/4 inch, which the examiner acknowledges is not expressly disclosed by Anderson. Citing In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), the examiner takes the position, however, that it would have been obvious to form Anderson's slits with a width in the claimed range, "since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art" (final rejection, page 2). The appellant (brief, pages 4-5) argues that the optimum width range for Anderson's slits will not be the same as for the appellant's slits because, unlike the appellant's slits, Anderson's slits are provided with clamps for forming a seal around the lock of hair clamped therebetween to prevent treating solution from seeping downwardly through the clamp into contact with hair beneath the slit 15, thereby indicating a zero, or as close to zero as possible, width. We appreciate that Anderson discloses clamping the lock of hair

within the clamping means and further discloses that the greater lengths of Anderson's slits permit the slit width, while not critical, to be preferably "as small as practicable" (column 4, lines 49-51). For the reasons articulated by the examiner on page 5 of the answer, however, the disclosed clamping action of the clamping means 14 does not preclude or teach away from a slit width in the range of 1/64 inch to 1/4 inch. As pointed out by the examiner, Anderson teaches clamping a **lock** of hair (i.e., a grouping of hairs), not a single strand, in the clamping means 14 and thus would have suggested a slit width of a few human hair widths in order to accommodate the lock of hairs therein. Accordingly, a slit width of 1/64 inch, the width of just four average human hairs<sup>1</sup>, or slightly greater would have been obvious to one of ordinary skill in the art. The recited slit width of 1/64 inch to 1/4 inch thus does not patentably distinguish appellant's claims 1-17 over Anderson.

Claims 6, 9, 11/9 and 12-16 further recite that the spacing between the slits is in the range of 1/2 inch to 2 inches. Although finding that the spacing is not expressly disclosed by Anderson, the examiner has determined that spacing of the Anderson slits within the claimed range would have been obvious "since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art" (final rejection, page 3).

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<sup>1</sup> The appellant has not disputed that an average human hair is approximately 0.004 inch (answer, page 5)

In both the brief (page 8) and reply brief (page 4), the appellant argues that the optimum range between Anderson's jawlike clamps will not be the optimum range between the appellant's slits and that, thus, an optimum range for Anderson will not correspond to an optimum range for the appellant's invention. Thus, according to the appellant, the appellant's spacing range is not rendered obvious by Anderson. As pointed out by the examiner on page 6 of the answer, however, the appellant has not come forth with any evidence to support this argument.<sup>2</sup> We find nothing in either the appellant's specification or Anderson which would indicate that the considerations for optimum spacing would be different for Anderson's cap than for the appellant's cap. Indeed, both the appellant's invention and that of Anderson have as one of their objectives facilitating the process of pulling the hairs through the openings of the cap and achieve that by providing elongated slits rather than small openings, such that locks or shanks of hair can be pulled through each slit (see column 1, line 56, to column 2, line 9 and column 3, lines 23-28, of Anderson and page 2, lines 16-24, of the appellant's specification) to enable the hair to be treated to impart designs to the hair (column 1, lines 14-19, of Anderson and page 2, lines 19-20, of the appellant's specification). These common objectives would indicate a commonality of size and spacing considerations between Anderson's and the appellant's inventions. We additionally note

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<sup>2</sup> An attorney's arguments in a brief cannot take the place of evidence. In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

that the spacing illustrated in Figure 1 of Anderson appears to be very similar to that illustrated in the appellant's Figure 1.

Moreover, Anderson teaches that "the number and arrangement of the clamps 14 on any given cap will be determined by the particular decorative effect for which it will be used" (column 2, lines 58-60). The following quotation from In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), is applicable here:

The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. [citations omitted] These cases have consistently held that in such a situation, the applicant must show that the particular range is *critical*, generally by showing that the claimed range achieves unexpected results relative to the prior art range.

In this case, the appellant has not provided any evidence to show that the claimed spacing range achieves unexpected results relative to Anderson's invention.

For the foregoing reasons, the appellant's brief and reply brief fail to persuade us that the examiner has committed any error in determining that neither the width limitation in independent claims 1, 9, 13 and 17 nor the spacing limitation in claims 6, 9, 11/9 and 12-16 patentably distinguishes these claims from Anderson's cap. Inasmuch as the appellant has not made any arguments against the rejection of claims 1-4, 6, 7, 9, 11/9, 13, 15/13 and 17 other than the ones discussed above, which we have not found persuasive, we shall sustain the examiner's rejection with respect to these claims.

Claims 5, 10, 11/10, 14 and 15/14 all require that the slits be zig-zag shaped. While Anderson discloses that the inventive cap is to be used for treating portions of a person's hair in a predetermined pattern (column 1, lines 15-16) and teaches that "the number and arrangement of the clamps 14 on any given cap will be determined by the particular decorative effect for which it will be used" (column 2, lines 58-60), the examiner has not pointed to any teaching or suggestion in Anderson that the slits be zig-zag shaped or, indeed, any shape other than linear. In establishing a *prima facie* case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, e.g., Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). The examiner's conclusion that "the zig-zag shape does not appear to be anything more than one of numerous shapes or configurations a person [of] ordinary skill in the art would find obvious" (final rejection, page 4) is not supported by any evidence and thus does not fulfill the examiner's obligation to provide a reason why one of ordinary skill in the art would have been motivated to form the slits of Anderson's cap in a zig-zag shape to



arrive at the claimed invention. Accordingly, the rejection of claims 5, 10, 11/10, 14 and 15/14 as being unpatentable over Anderson cannot be sustained.

Claims 8, 12 and 16 call for the slits to be “configured with interlocking seams for a linear press-closure which holds together by interference between two linear elements of either side of the seal such that the slit can be partially closed to tighten the slit upon the shank of the hair.” The examiner concedes that such slits are not disclosed by Anderson and relies on Sanzo for a suggestion to provide such a feature on the Anderson slits.

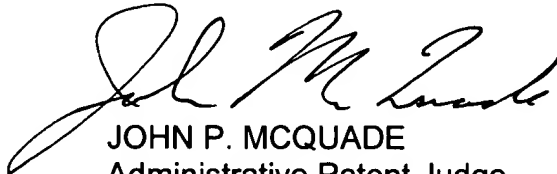
Sanzo discloses a hair bleaching appliance which consists of a generally cylindrical or rectangular container 10 or 50 formed of two halves 11, 12 or 41, 42 which are hinged together by way of a piano-type hinge 14. The container halves preferably taper down to edges 20, 21 which meet when the halves are closed. Each of these edges is provided with “a groove within which is received a strip or rib of sponge rubber which strips come together when the container is closed to seal it and to grip and hold the hair which is held within the container” (column 2, lines 29-33). Like the appellant (brief, page 6), we find in this edge seal arrangement of Sanzo no interlocking seams as required by claims 8, 12 and 16. It thus follows that we cannot sustain the rejection of claims 8, 12 and 16 as being unpatentable over Anderson in view of Sanzo.


CONCLUSION

To summarize, the decision of the examiner to reject claims 1-17 under 35 U.S.C. § 103 is affirmed as to claims 1-4, 6, 7, 9, 11/9, 13, 15/13 and 17 and reversed as to claims 5, 8, 10, 11/10, 12, 14, 15/14 and 16.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

  
JOHN P. MCQUADE  
Administrative Patent Judge

  
JEFFREY V. NASE  
Administrative Patent Judge

  
JENNIFER D. BAHR  
Administrative Patent Judge

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